Application No.: 10/723,824

Office Action Dated: December 15, 2006

REMARKS

Status of the Claims

 Claims 1-15 and 17-18 are pending in the Application after entry of this amendment.

- Claims 1-18 are rejected by the Examiner.
- Claims 1, 5, 8, 11-15, and 17-18 are amended by Applicant.
- Claim 16 is cancelled.

Interview Summary

Applicant thanks the Examiner for granting a telephone interview held on 2/21/07. During that interview, Applicant explained how proposed amendments overcome the 35 USC §101 rejection by placing the Claims 1 and 8 in the context of a computer implemented method that has a tangible result of displaying information. Also, Applicant described how the claimed invention can be amended to more clearly claim the enhancements of data tips provided by the specification. The Examiner graciously agreed to carefully read and reconsider the claimed invention in light of amendments made in this response.

Claim Objections

Claims 11, and 14-17 are objected to for informalities. Applicant amends Claim 11 to include the complete phrase "indication of a presence" as suggested by the Examiner. Applicant amends Claims 14-15, and 17 to include the phrase "The system of" as suggested by the Examiner. Applicant respectfully submits that the amendments fully address the stated objections.

Claim Rejections Pursuant to 35 U.S.C. §101

Claims 1-12 are rejected under 35 U.S.C §101 because the claimed invention is directed to non-statutory subject matter. The present Office Action dated 12/15/06 indicates on page 2 that Claims 1-12 recite a data structure without defining any functional interrelations which permit the computer program's functionality to be realized. Applicant respectfully traverses the rejection.

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Applicant amends independent Claim 1 to more clearly recite the invention. Amended Claim 1 is directed to a method for indicating, on a computer display, the values of variables in a software program under development. As such, Applicant respectfully submits that amended Claim 1 does not recite a data structure.

Claim 1, in relevant part, recites a method which includes the steps of detecting the position of a pointer on a computer display associated with an expression in the program under development, reading and evaluating the expression, displaying at least one item value in a first item window on the computer display, the item value associated with a variable in the expression, wherein an indication of at least one sub-item value associated with the variable is present, and responding to a pointer request for a first sub-item value by displaying a first sub-item window on the computer display containing the first sub-item value, the first sub-item window being separate from the first item window on the computer display; the first item window and the first sub-item window displayed simultaneously.

Since amended Claim 1 recites a method to display the values of variable on a computer display, Applicant submits that amended Claim 1 is useful and has the tangible result of providing a visual indication of information on a computer display. Applicant respectfully requests withdrawal of the 35 U.S.C §101 rejection of Claim 1 and its related dependent method Claims 2-7.

Applicant amends independent Claim 8 to more clearly recite the invention. Amended Claim 8 is directed to a method of displaying related data sub-items corresponding to a cursor-selected object displayed on a computer screen. As such, Applicant respectfully submits that amended Claim 1 does not recite a data structure.

The method steps of Claim 8 include determining that a cursor is positioned to point at the cursor-selected object on the computer screen, loading the cursor-selected object, evaluating the cursor-selected object to determine if the cursor-selected object has a variable value and related data sub-items and if the related data sub-items are capable of expansion into lower-tier sub-items. The method continues with the steps of assembling values for the cursor-selected object and the related data sub-items and then displaying on the computer screen the values of the cursor-selected object in a first display window and the related data sub-items along with an indication of a presence of the lower-tier sub-items in a second display window, the first and second display windows are displayed simultaneously.

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Since amended Claim 8 recites a method to display data sub-items on a computer display, Applicant submits that amended Claim 8 is useful and has the tangible result of providing a visual indication of information on a computer display. Applicant respectfully requests withdrawal of the 35 U.S.C §101 rejection of Claim 8 and its related dependent method Claims 9-12.

Accordingly, Applicant respectfully requests withdrawal of the 35 U.S.C §101 rejection of Claims 1-12 because the claimed invention is directed to a method having a useful and tangible information display result which is statutory subject matter under 35 U.S.C §101.

Claim Rejections Pursuant to 35 U.S.C. §102

Claims 1-18 stand rejected under 35 U.S.C. §102(b) as being anticipated by Applicant provided NPL document, "Microsoft, Tiptoe Through the ToolTips With Our All-Encompassing Tool Tip Programmer's Guide" (Microsoft TipToe Through). Applicant respectfully traverses the rejection.

The present Office Action dated 12/15/06 on page 3 indicates that the Claim 1 element of "reading and evaluating the expression" is performed by a person and is inherent. Applicant respectfully disagrees. Applicant amends independent Claim 1 to indicate that the recited method is performed by a computer and that the variables are displayed on a computer display.

As indicated in paragraph 0024 of the as-filed specification, in relevant part:

"The preferred embodiment of the present invention displays a data tip when a mouse cursor points to a variable for a sufficient amount of time. The functionality of the invention is useful, for example, while using a debugger during software development. Upon activation, the invention reads the expression under the cursor and evaluates it. If the expression can be evaluated, then a data tip appears with the expression and a window indicating its value. The window may indicate that a further breakdown of the variable is possible. Once selected, the further breakdown provides a second window that displays more variable values. These additional variable values

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may be "child" items to the "parent" expression or member fields..." (paragraph

0024)

Thus, the present invention includes, among other aspects, the evaluation of an expression under a cursor and the display of a data tip in a first window and, if further selected, the generation of a second window simultaneous with the first window. (See Figures 4-7.) Paragraph 0043 of the as-filed specification describes Figure 4 as the user interface screen showing how a "+" widget expansion indicator in the data tip indicates the existence of sub-items in the selected variable. Selection of the expansion indicator triggers a display of the list of sub items in a new data tip. The advantages of the display in a new window are discussed in paragraph 0044:

"While this behavior is similar to the behavior of the existing watch windows in the debugger, it differs in a significant manner. The sub-items or "child" members are displayed in their own window. That concept has several significant advantages. One is that less screen real-estate may be covered than if the expansion happened within one window. Depending on the data being shown, this savings can be significant. Another advantage is that the separate window can be individually scrolled...." (paragraph 0044)

In another aspect of the invention, Figure 6 is used to demonstrate the display of multiple windows containing items and sub-items where a transparency of the displayed data tips may be invoked. As stated in paragraph 0047 of the as-filed specification, the transparency may be invoked without dismissing the data tips windows:

"Figure 6 depicts an aspect of the current invention that allows a user to view information on screen 200 that has been obscured by the presence of a data tip. Figure 6 depicts the view of Figure 5 where the user has a desire to see what lies underneath the data tip without dismissing the data tip and thus losing the information displayed thus far. Using the current invention, the user may depress a pre-defined control key or other control mechanism, such as an alternate mouse button, and the data below the data tips 310 and 430 may be viewed because the data tips become transparent. Note that transparency allows the user to see the underlying information of screen 200 but

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also allows the user to view the boundaries of the now-transparent data tips 310 and 430. To exit transparency mode, a user may either release the depressed control key or depress another control key or function to restore the data tips 310 and 430 to the pre-transparent condition shown in Figure 5." (paragraph 0047)

Applicant amends independent Claims 1, 8, 13, and 18 to include the aspect of displaying an item variable in a first window and a sub-item value in a separate second window that is displayed simultaneously with the first window. Claim 13 is also amended to include the subject matter of Claim 16 which includes display of a third window for lower tier sub-item display. The cited reference, Microsoft TipToe Through, does not teach displaying a variable in a first window and the variable values in a second window simultaneously displayed.

Applicant amends dependent Claims 5, 12, and 17 to include the aspect that a transparency of the multiple data tip windows is invoked without dismissing the data tip window. The cited reference, Microsoft TipToe Through, does not teach making data tip windows transparent without dismissing the windows.

Since the cited reference fails to teach the aspect of simultaneous and separate data tip windows that display items and sub items, then the cited reference cannot anticipate the amended independent Claims 1, 8, 13 and 18 and their respective dependent claims. Accordingly, Applicant respectfully requests withdrawal and reconsideration of the pending claims.

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Conclusion

In view of the above remarks and amendments, Applicant respectfully requests withdrawal of the 35 U.S.C. §101 and 35 U.S.C. §102(b) rejections and requests reconsideration because the pending claims patentably define over the cited art.

Respectfully submitted,

Date: March 15, 2007 /Jerome G. Schaefer/

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